

The conventional wisdom, both among public-policy experts and the voters on the street, has been that Proposition 13 was roughly equal to the Sylmar earthquake, except that we inflicted it upon ourselves.

# The Demise of California's Public Schools Reconsidered

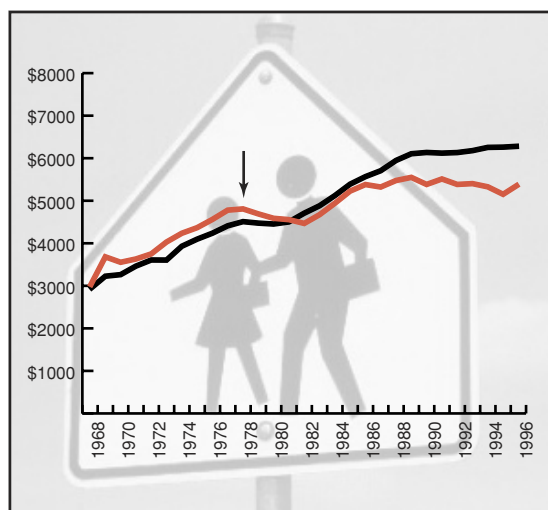
by D. Roderick Kiewiet

I'm not sure when I first got interested in this particular line of research—the fact that I have a son who is now 10 and that we had to make a lot of decisions about his educational future probably got me a bit worried, but I think it actually dates back to when we first arrived in California in the fall of '79. It seemed that all anyone was talking about was Proposition 13, which had passed by a nearly 2-to-1 margin (65 to 35 percent) the previous year. Everywhere we went, it was Proposition 13 this and Proposition 13 that. Some people felt that the voters had just gotten into an angry snit and had irrationally gone on an antigovernment crusade without thinking about the consequences; people on the other side felt that they had been provoked by then-governor Jerry Brown's inane fiscal policies. I don't know if we ever sorted that out, but the conventional wisdom, both among public-policy experts and the voters on the street, has been that Proposition 13 was roughly equal to the Sylmar earthquake, except that we inflicted it upon ourselves.

For those of you who may not know, Proposition 13 was a statewide initiative that rolled back property-tax valuations significantly for then-current property owners. (This has led to huge disparities in tax bills for similar houses on nearby lots, depending on whether the owner bought the house pre- or post-Proposition 13; this has caused a lot of interesting socioeconomic behavior, but that's another story.) Proposition 13 also stipulated that in the future, local property taxes would be calculated at 1 percent of the price at which a property last sold, plus an allowance for a 2 percent per year increase. And, quite obviously, at least for a while, it reduced the amount of income that state and local governments were able to derive from property taxes. Then, in 1979, a companion measure, Proposition 4, the Gann initiative, limited increases in state spending to the rate of inflation plus the rate of population growth—a double whammy.

But public education got a triple whammy, with the third being the *Serrano* decisions. In the original *Serrano* decision (*Serrano v. Priest*, 1971), the California Supreme Court ruled that the existing system of public finance, which was essentially the local property tax, was unconstitutional. The reasoning was that all children in California had a fundamental right to equal public education, but if the funds for that education had to come from the local property-tax base a child living in, say, Baldwin Park could expect substantially less support than a child living in Beverly Hills. The good people of Baldwin Park would have to tax themselves at a rate perhaps 10 times higher than the people in Beverly Hills to support the same level of expenditure in their local school district. *Serrano* forbade local school districts, at least *as* school districts, from spending more per pupil than the state average. (There are ways around this—some wealthier school districts have put together private foundations that have by now raised very substantial sums. No one really knows how much, because not everything they do has to be reported, but according to a recent study, such foundation money supplements spending in many districts by as much as 15 percent.) On the other hand, *Serrano* also stipulated that the state government would give the poorer districts as much money as was needed to bring their per-pupil spending up to the norm. The decision went through the courts for a while; *Serrano II*, in 1976, basically required its very rapid implementation, and by 1982, for all practical purposes, it was in place. So the widespread belief is that the reduction in tax take from Proposition 13 and its companion measures, plus the *Serrano* equalization mandate, led to a dramatic decline in public kindergarten-through-12th-grade education in California.

In a recent book called *Paradise Lost: California's Experience, America's Future*, Peter Schrag, a long-time editorial-page editor for the *Sacramento Bee*,



**Left: State and local per-pupil spending on public schools (kindergarten through 12th grade) in California (red) and the average for the rest of the United States (black). The arrow marks the passage of Proposition 13 in California; a decline in spending followed immediately.**

It should be noted that the linkage between expenditure levels and student performance, which is usually measured by some standardized test, is tenuous at best. In fact, if you look at the performance of the average pupil in a state, versus that state's spending per pupil, the relationship is slightly negative. In the 1997–98 academic year, for example, New Jersey spent over \$10,000 per pupil, New York about \$8,800, and quite honestly, on average, their students do poorly compared to places like North Dakota, which spent \$5,100 per pupil and whose students do very well. But spending varies all over the map—Wisconsin spent \$7,100 per student and Iowa \$6,000, and their students are also top performers. California spent \$5,500 per pupil; the national average was \$6,000.

When you look at California's test scores correctly, in my view, the data are not that discouraging. Since the early '60s, the proportion of high-school seniors taking the SATs and the ACTs has gone way up. These used to be elite tests that only the college-prep kids, a small minority in each class, would take. Now nearly everyone takes them. So for as many students to be doing as well as they are is actually, by some definitions, a remarkable accomplishment. When you break down SAT scores by ethnicity, you see that over the last 20 years, there has been—not so much among white students, but among black and Latino students—a very steady and impressive improvement.

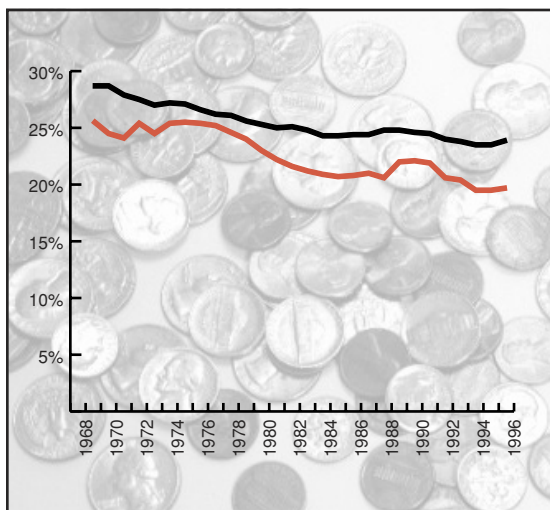
Expenditure data can also be misleading. For example, the L.A. Unified School District employs one of the largest police forces in the state of California. That money shows up on the books as educational spending. And a few years ago there was a proposal to require that 90 percent of the education budget had to be spent in the classroom and not on administration. I can't conceive of that affecting what a school district does. You just call stuff "classroom" and not "administration." So you really have to be careful with these data.

says that "the passage of Proposition 13 serves as a convenient way of dividing the post–World War II era in California between the postwar period of optimism, with its huge investment in public infrastructure and its strong commitment to the development of quality education systems and other public services, and a generation of declining confidence and shrinking public services." I think this captures the view shared by a very large number of people: Proposition 13 is a watershed event that demarcates a much nicer and more glorious past from a fairly troubling present and future. With that, let's take a look at the actual data.

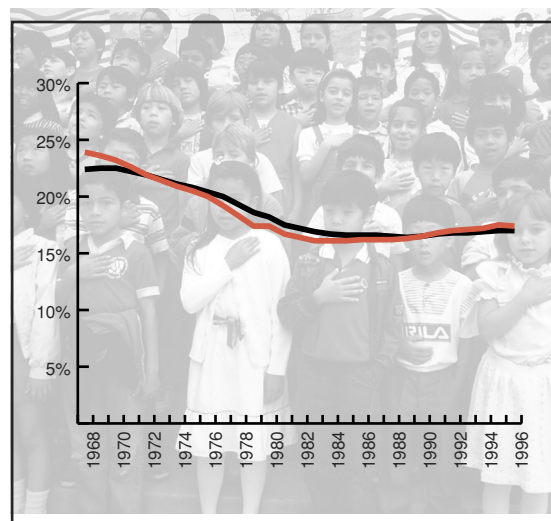
The plot above shows per-pupil spending from 1968 through 1996 in California (the red line), versus the rest of the United States. (I have converted all the data here and throughout into constant 1997 dollars. At this point, I would also like to thank grad student and Excel guru Erik Terreri, who gave me a great deal of assistance in getting all this data together.) You can see that there's reason to believe that Schrag is right—the timing is right on the money. Before 1982, we spent somewhat more, per pupil, than the rest of the country. After that we tracked the other states from below for a while, and then we fell dramatically behind in the late '80s as the recession kicked in. I should mention that by "the rest of the country," I don't mean the national average. With California now containing about 12 percent of the country's population, we've got enough weight to swing the national average around. I mean the average expenditure of all the states except California and Alaska. Alaska has a public-finance system that looks a lot more like Saudi Arabia's than an American state's, so it's not usually included in these kinds of analyses.

If you look at rankings, we were 18th from the top in per-pupil spending in academic 1975; by our nadir (1995), we were 41st. Translated into average class size, we were 49th—Utah managed to get under us. And the performance of Califor-





**Right: The percentage of California's total population enrolled in public schools does not differ significantly from the national average.**



**Above: But if you look at the data in terms of spending per pupil per thousand dollars of per capita personal income (a much better measure of how much money is actually available to be taxed), the numbers tell a different story. Spending began a slight downturn even before Proposition 13 passed, but has really remained fairly constant. Right: Proposition 13's chief effect can be seen by plotting total expenditures by all levels of state and local government per thousand dollars of personal income. Spending in California dropped sharply, but has gradually rebounded as these governments have turned to other sources of revenue.**

nia schoolchildren on a series of standardized tests also declined, all pretty much in step with this decline in public expenditures.

But there's another way to look at the level of state and local support for education. The graph above shows spending per pupil in terms of the available tax base, i.e., per thousands of dollars of real personal income per capita. Here you see a different pattern that has a lot more continuity. In fact, we *never*, during this entire period, spent as much per pupil per available resource as the rest of the country. What's going on here? This curve is nearly flat, so even if we've always been a little chintzy compared to the rest of the country, why did spending per pupil in the previous graph suddenly take a tumble?

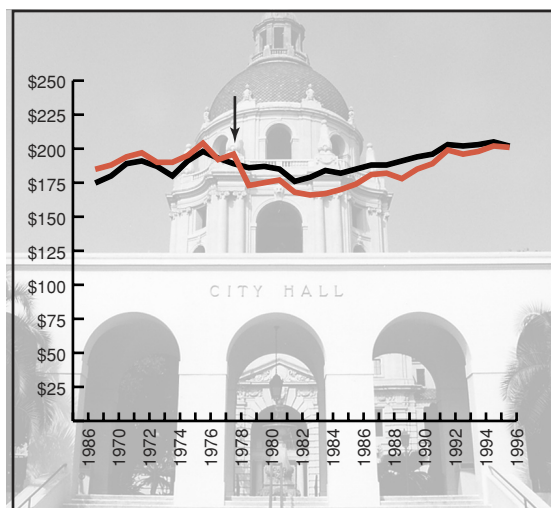
One possibility might be that we just don't tax ourselves very hard in general. That's not true, it turns out. It hasn't been, and still isn't, throughout this 30-year period. If you sum up all the expenditures made by state and local governments (below), you'll see that before Proposition 13 we were spending a little more than the rest of the

country, and after Proposition 13 we spent less. Proposition 13 hammered us for a year or two, but we had a five-billion-dollar surplus at the time that cushioned the blow, which was one reason why people voted yes on 13 in the first place. They felt that Jerry Brown was sitting on their money. We've been catching up with the other states since then, and now we're about even. So our decline in per-pupil spending is not the result of not taxing ourselves enough, or of not spending enough public money in general.

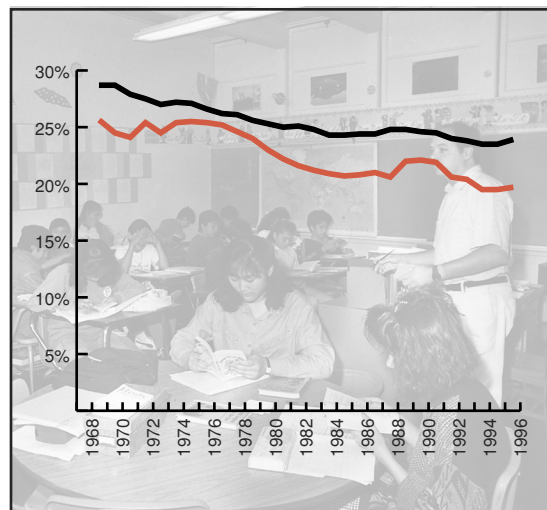
Another possibility came to me one day when there was a big public event at Beckman Auditorium—I think it was a puppet show—and hundreds of school buses converged on the campus. Caltech was just taken over by six- to nine-year-olds, and I thought, "My God, there's a lot of kids in California!" And so I thought, well, maybe we can't spend as much per pupil because we have so many more of them. Maybe the state has a very young age structure, and there are just a lot more public-school children in California as a percentage of the population. But if you can see the difference between the two lines in the plot above, your eyes are pretty good, because there isn't much. With certain exceptions, like Florida, it turns out that there aren't major differences in the age structures of America's states.

All right then, I wondered, does California send more of its students to private schools? No. It turns out we don't.

So we're not spending less per pupil because we're spending less on everything. We're not spending less per pupil because we have more pupils per capita. What the figure at the top left of the next page shows is that we're spending less per pupil, basically, because we devote less of our budget to it. The figure charts the combined expenditures of state and local governments, because—California's not unique, but we may be the extreme case—the admixture of state and local funds from program to program is so complicated



**Right: California has always (at least for the last 30-odd years) spent a smaller percentage of its state and local budgets on K-12 education than other states.**



that figuring out where one stops and another starts is frankly not worth it. In any case, I think you get a more accurate picture by looking at the combination of state and local spending. And, again, you see that we always have devoted, and continue to devote, less of the overall budget to public education than other states. In fact, if we pulled our spending percentage up to the national average, our expenditures per pupil would be a little higher than the national average.

Well, if we've got just as large a budget (adjusted for population, etc.) as the other states, and we're spending less on K-12 education, that means we've got to be spending more somewhere else. And, in fact, the one place where we now and for this entire period have spent substantially more per capita than the other states is law enforcement. (This is a slight misnomer; what I've tracked below is actually cops and prisons. Police and prison expenditures are about 75 percent of the total criminal-justice budget. Judicial administration and court expenses add another 25 percent or so to these numbers.) Right now we

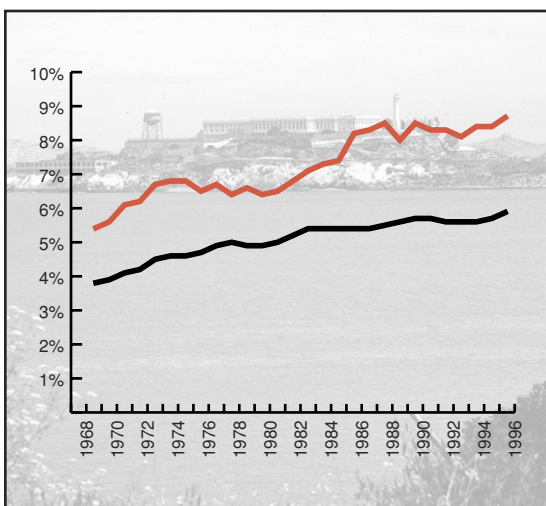
spend nearly 3 percent more of our budget—about 8½ percent, compared to a bit less than 6 percent for other states—on cops and prisons. If we were to shift that money—about \$900 per pupil, or, at 5.7 million pupils, roughly \$5 billion per year—to education, we'd basically be up to the national average. Of course, that would mean having a lot fewer police cars on the street and a lot more bad guys walking around, but that's the sort of trade-off that policy makers must engage in. And in California we tend to err on the side of cops and prisons.

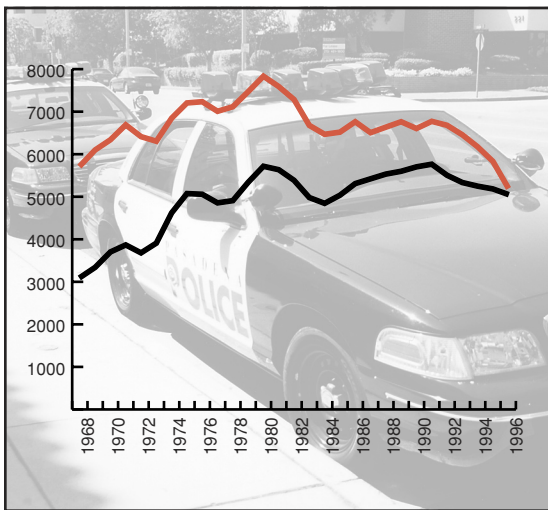
In 1968, the California prison population was about 16,000; now it's about 165,000. That doesn't include the very large batch of people in county slammer—to be counted as a prisoner, you have to be sentenced to a year or more. I think we're getting really good at building prisons, by the way. We can put a 4,500-unit, state-of-the-art facility on line for about 330 million bucks. We do the same thing with prisons that the French did with nuclear power plants—we just apply the same plan over and over, like a cookie cutter. There are certain economies there.

Is this bad public policy? The statistic I always read is that spending on prisons is crazy because it costs \$30,000 a year to send a kid to Harvard, and about \$75,000 to put him in Avenal. Well, a lot of people have done economic analyses of this, and prison actually looks like a pretty good investment if you're worried about the return to society. These studies say that inmates, were they not in prison, would each be doing some \$100,000 per year's worth of economic damage to society on average. That's apart from what disutility you might get out of being hit over the head while you're being mugged. So on an economic basis, we could lock a lot more people up before the marginal cost of locking up the next inmate equals the marginal gain to society monetarily.

But there are other reasons why people are put in jail and kept there, over and above straightfor-

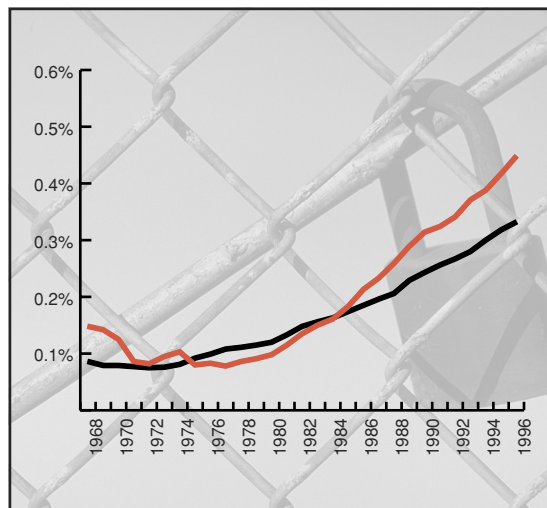
**Left: On the other hand, we've always spent more on cops and prisons, such as the now-decommissioned Alcatraz.**





**Left: The crime rate in California, as measured by the FBI's Uniform Crime Report Index, has in the past far outpaced the national average. We've recently caught up, however—or caught down, as the case may be.**

**Below: Is this dramatic drop a consequence of our prison-building binge? We jail a larger percentage of our population than all but a few other states.**



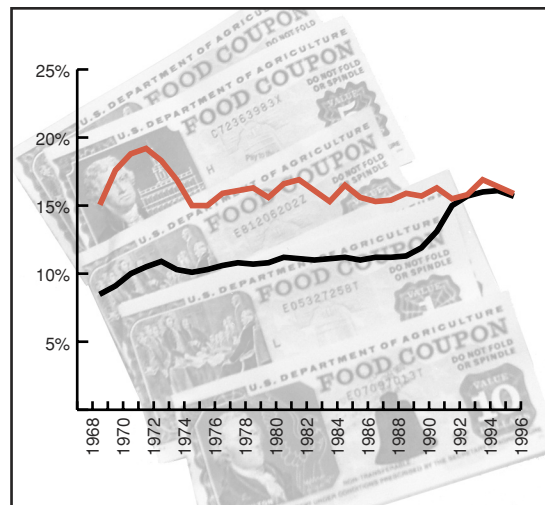
statistics, the crime rate in California was lower than the national average. (In 1980, by way of contrast, it was about 30 percent higher than the national average.) Crime in California has gone down by about 35 percent over the last five years, as we've locked up very large numbers of people, compared to a decline of about 15 percent for the rest of the country. So we are locking up a lot of guys (left); crime is going down. Whether A causes B, who knows?

Moving on, I also charted spending on public assistance (below). We historically have spent a lot more on welfare than the other states, but in the early '90s they caught up with us. They responded to the recession by increasing welfare expenditures, as one might expect. We didn't do that, as you may recall—we cut back on welfare

**Left: "Welfare" encompasses a spectrum of social services, including Aid for Families with Dependent Children (now called Temporary Assistance for Needy Families), General Assistance, Supplemental Security Income, programs to help the blind and disabled, children's services, and foster homes. The hump in the California data from the early 1970s may be an artifact.**

ward economic calculations. When my wife worked as a prison librarian in Connecticut in the 1970s, she had two inmate helpers named Stosh and Phil. Well, shortly after World War II, Stosh had cut his wife up into little pieces, and Phil had murdered a highway patrolman. And all those years later they were still in jail. So there are punitive, as well as economic, reasons for long prison sentences.

Crime data (top) suggests that California's expenditures are paying off. In 1997, for the first year in history since the FBI began keeping these



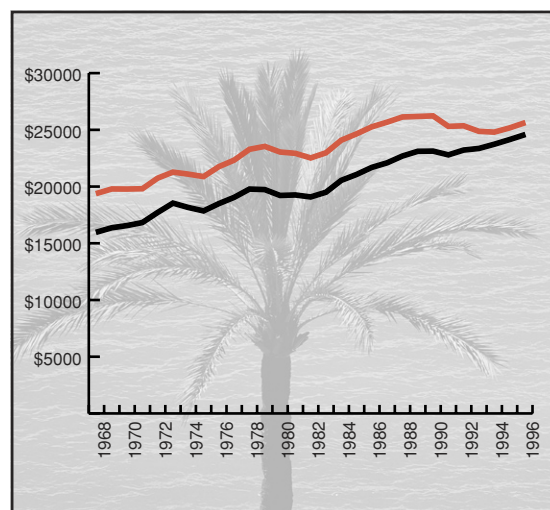
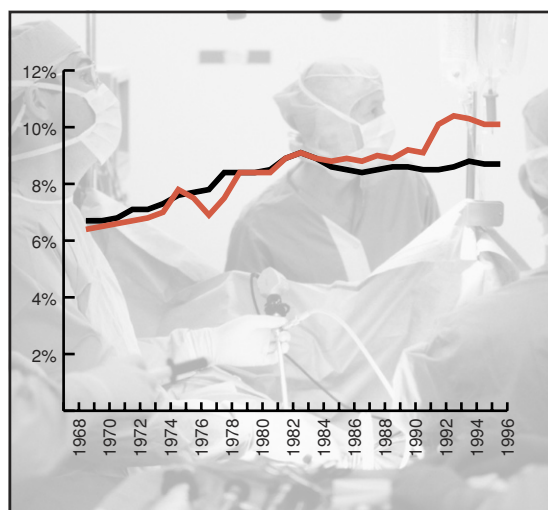
spending instead. That is, California decreased individual payments. But the caseload grew, so the overall welfare budget held steady. In other words, the total pie stayed the same, but there were more people, so that each person got a smaller slice. In the last couple of years (not shown on that graph), expenditures nationwide have declined as welfare reform has kicked in and welfare rolls have shrunk dramatically.

And finally, I looked at spending on county hospitals and public-health programs. As you can see at the top of the next page, we kept pace with the national average pretty closely until the '90s,



Right: California's spending on health care and hospitals tracked the rest of the nation's fairly closely until the beginning of the '90s.

Far right: While California still epitomizes the good life for many, we aren't as filthy rich as we used to be—the rest of the country is fast catching up.



when we started spending about 2 percent more on health and hospitals. I don't know exactly what happened, but I think it's a substitution effect. People on welfare automatically get Medi-Cal, which is a form of health insurance. But when they leave welfare, they generally get low-paying jobs that don't include health benefits. Then, when they show up at the hospital uninsured, the county eats the cost of their care instead of charging it to the Medi-Cal budget. If you add the numbers together, you'll actually see quite a continuity in overall welfare, health, and hospital spending. It's just that we've shifted money away from the welfare account, which includes Medi-Cal, and toward the county hospital and public-health budgets.

So all our per-taxpayer spending patterns have been very consistent, year in and year out, which brings us back to the initial question: Why has spending per student taken a nosedive since the passage of Proposition 13? The answer is actually fairly straightforward. If you look at the relative size of the tax base in California, that is, our real per-capita income compared to the rest of the country, we used to be quite rich, as shown above right. In 1968, per-capita income in California was 21 percent higher than that in the rest of the country. Today, it's about 4 percent higher. It would be easy to blame bad policy choices by the people who run California, but I don't think that's the problem. It's really part of a very long-term convergence in state incomes nationwide. In 1965, for example, the states of the former Confederacy had, believe it or not, per-capita incomes of about 75 percent of the national level. Now they're up to about 90 percent. And you see similar dramatic convergences across all the states. Per-capita incomes in the rich states are growing, too, but incomes in the poor states have grown faster. And obviously if we grow, say, half a percent less quickly per year over a long period of time, we'll lose ground, in relative terms, as the

poor states catch up. So the rich states are still rich, in absolute terms, but they just aren't as rich as they used to be in comparison to the poor states. What this means for us is that the affluent California of 1968 could devote a relatively small share of its resources to public schools and still outspend the rest of the country on a per-pupil basis. The more-average California of 1997 has not changed its spending habits and so falls short. Our history of chintzing out has caught up with us, and we can no longer get more while spending less.

Is *anything* in these data connected with Proposition 13? There's that hiccup around 1980, but that's about it. I think any effect attributable to the loss of revenue associated with Proposition 13 was small and transitory.

Well, what about the third whammy I mentioned at the beginning—the *Serrano* decisions? Have they had an effect? To refresh your memory, the *Serrano* decisions basically mandated equal per-student expenditures, to within \$100 or so (it's now to within about \$300, because of inflation), in all California school districts. As usual, California led the way with this, but by now there have been 24 other states that have had *Serrano*-like decisions. These things have to wend their way through the courts, so about 11 states—it depends on how you count—have actually implemented *Serrano*-like equalization schemes and by now have had some experience with them. I had Jamie Bishop, a SURF (Summer Undergraduate Research Fellowship) student from Purdue, look at them last summer, and most of those states, if anything, had actually shifted more money *into* education. In 1998, for example, the people in New Hampshire had their local-property-tax basis of funding public education declared unconstitutional, and they came *that close* to going with a state income tax. They somehow managed to avoid it, but they raised another \$100 million—which is a lot for a little state like that!—to come up with the additional monies they needed. (They have less

I'm a political scientist, so the theory of education is not my field. But in all the studies I've read on student performance (again, as measured by one of those four or five standardized tests), the variable that's been found to correlate most strongly is the educational level of the student's mother. Once you control for that, the rest of the variables don't explain an awful lot of the remaining variance. And the good news is, overall education levels are higher, particularly in minority populations. Black and Latino children have much higher graduation rates and college-attendance rates than their parents. They are still significantly below white and Asian children, but the gap is closing. We continue to live in a world where each generation of children is somewhat better educated than their parents.

Alan Krueger of Princeton has been analyzing the data generated by the state of Tennessee's massive four-year study, called the STAR (for Student/Teacher Achievement Ratio) experiment. His findings suggest that reducing class size appears to have a small, but persistent and cumulative, effect. In other words, the students who are in small classes as first- and second-graders do a little better at that time, and continue to do a little better throughout the rest of their school years. So former governor Pete Wilson's idea of mandating smaller class sizes is probably a good one.

I know of another study, by Julian Betts at the University of San Diego, which found that homework seems to help. Lots of schools don't require much homework, and it turns out that the students at the ones that do tend to score consistently better. Of course, to make that happen, parents have to make sure that the homework gets done. The schools can roar at the ocean like King Lear, and nothing is going to happen if the parents are not involved. I think the partnership between schools and parents is critical, and a lot of times that's been missing in California. So it's not just expenditures that's to blame. I'm sure many of you have had the experience of looking at your kid's homework and saying, "You're in fifth grade, and you're doing long division with remainders? Sheesh, you should be farther along than that." So you spend a lot of time with your child supplementing the school curriculum, especially in science and math. Unfortunately, that really exacerbates inequalities in opportunities—if your parents are Caltech graduates, you can go to an awfully crummy school and you're probably still going to be fine, at least educationally. Maybe not emotionally or psychologically. But my point is that the parents supplement what's going on in the classroom.

than four percent of our school population, so this is roughly comparable to us raising over \$2.5 billion.) Furthermore, over the last 30 years virtually every state in the country has seen a substantial shift in public support from local to state-level sources. These days, about two-thirds of public elementary- and secondary-education money comes from the state. So local property taxes are becoming less tightly linked to educational spending.

To sum up, I think Mr. Schrag and the conventional wisdom are wrong. In the greater scheme of things, the effects of Proposition 13 and its companions on educational spending today are negligible. Instead, I see amazing patterns of continuity, both in the extent to which we're willing to tax ourselves, and the budget shares that various functions of state and local government receive. Budgetary data from many different

areas have this quality. There's a lot of weeping and gnashing of teeth every year as the budget battles occur, but when the smoke settles, everybody gets about what they got the year before plus a little more. A friend of mine, the late Aaron Wildavsky, invented a theory about it he called incrementalism. It happens every time—look at what Governor Gray Davis proposed to do with the additional four billion dollars that the accountants say have miraculously accumulated in California's treasury as a result of the strong economy. Guess what? Education's going to get about \$1.3 billion of it, which is right in line with the proportion it's always received. So even today, at the margin, when you give the state government an additional four billion dollars and watch 'em spend it, it gets divided up in very much the same manner that the budget always has been. I'm not saying that California's public schools don't have problems, but I can't trace their plight to Proposition 13, or really see Proposition 13 as all that significant an event in the long term of California history.

As the economy improves, we will catch up somewhat with the rest of the nation, but we will never see significant gains until we start spending a larger share of the budget on education. We may be moving that way—education went up a little this last year—but there's no guarantee that that will continue to happen. □

*Professor of Political Science D. Roderick Kiewiet got his BA at the University of Iowa in 1974. He came to Caltech as an assistant professor in 1979 while still working on his PhD, which he got from Yale in 1980. He has written numerous papers on Californian and Russian politics, both of which many observers find to be inscrutably Byzantine. He has written one book, Macroeconomics and Micropolitics: The Electoral Effects of Economic Issues, and coauthored another, The Logic of Delegation: Congressional Parties and the Appropriations Process, (with Mathew McCubbins of UC San Diego) for which they shared the American Political Science Association's Kammerer Award for the best book on U.S. national policy. Despite his assertion that he is a latecomer to the study of education, he has long been interested in student welfare. He's served as dean of students (1992–96) and on half a dozen student-related committees, including his current stint on the Core Curriculum Steering Committee. This research is supported by the Haynes Foundation and the Public Policy Institute of California.*

*His son goes to a private school.*